

IN THE CLAIMS

*Please Enter
Amendment
myl
1/13/2005*

Please amend the status of the claims to that as indicated below:

Claims 1-58 (canceled)

59. (new) An apparatus for measuring hemoglobin index (HbI) in blood of a patient, comprising:

a light source generating broadband light;

a light-transmission arrangement including a plurality of transmitting fibers positioned for simultaneously transmitting multiple wavelengths of said broadband light from said light source to the blood of the patient;

an optical fiber arrangement having a plurality of light detector fibers for leading multi-wavelength light, in spectrally unseparated form, transmitted through, or reflected from, the blood;

a light detection arrangement receiving said multi-wavelength light in its spectrally unseparated form from said optical fiber arrangement, for spectrally decomposing the received light, and for determining amplitudes of selected wavelengths of the decomposed light; and,

means for utilizing a non-pulsatile element of the blood of the patient for determining a measurement of the hemoglobin index (HbI) in the blood as a function of the amplitudes of the selected wavelengths.

60. (new) The apparatus for measuring hemoglobin index (HbI) in blood of a patient according to Claim 59, further comprising means for utilizing a pulsatile element of the blood of the patient for determining the measurement of at least one analyte in the blood.